



Assessing the Impact of Hazara Motorway on Hotel Industry Growth in Hazara Region Under the China-Pakistan Economic Corridor, Khyber Pakhtunkhwa Province



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Abstract *This research work explores the influence of the CPEC on hotel industry progress in the Hazara region. Using a purposive simple random sample approach, the primary data was collected through questionnaire from 112 hotel managers/owners by addressing their responses to aspects related to the future hotel industry growth forecasts in the Hazara region under the CPEC. The technique used for the analysis of the study is logistic regression. The results show that hotel facility score, manager's awareness of CPEC, investment opportunities in hoteling industry under CPEC, the impact of the project seen in the region after initiating of project, and increase of tourist due to E-35 CPEC motorway are contributing to the growth of hoteling industry under the CPEC. The study concludes that it is expected that in the future, demand for tourism will increase, so there is a need to enhance the infrastructure and standards of hotels on the international level.*

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JEL Classification:

Introduction

The focus of this research is to find out the that whether under the China-Pakistan Economic Corridor (CPEC), the construction of the Hazara motorway that spreads along Pakistan's northern areas will significantly contribute or not to the growth of the hotel industry in the Hazara region? Forbes (2018), one of the most widely circulated business magazines in the United States, ranked Pakistan as one of the top ten countries to visit in 2019 through the famous Karakorum motorway, which is expected to enhance tourism in Pakistan (Ann Abel, 2019). In 2018, the British Backpacker Society, one of the world's premier tourism advisory

groups, graded Pakistan as the highest-rated country among twenty countries visited by backpackers (Sana Jamal, 2017). Due to the increase in tourism which has become an important part of the economy now, there is a demand to improve and construct hotels in the tourist visited places in Pakistan. The hotel sector in any tourism country also considered a backbone for tourism because hotels promotes the food culture and tourism of that country.

Quality of services are highly correlated with hotel industry growth and considered the lifeblood for the hotel sector (Min, 1997). According to Gundersen et.

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at., (1996) service quality leads to higher profitability. In Pakistan, the hotel industry contributes 3 percent to GDP (Javed and Hussain, 2018). From 2012-2014 the share of restaurants in the total employment is 1.31 percent (Labor Force Survey 2010-11). In Pakistan, the average household spends 1.14 percent of its overall food budget on hotels and restaurants (Household Integrated Economic Survey 2010-11).

Hoteling provide a safe and pleasant environment for tourist, which is a necessary requirement for tourism. Pakistan has already opened the Kartarpur corridor for religious tourism while visiting country and mountains tourism always remained on peek. But unfortunately, the hoteling sector could not have been improved on an international level because over the past two decades as Pakistan faced war and terroir. Due to the expansion of tourism, the hotel business requires development since it generates both direct and indirect job opportunities (Abbasi et. al., 2010). Pakistan has long been a tourist attraction due to its natural beauty. Hotels not only provide lodging for international visitors, but they also have a positive impact on the national budget (Abbasi et. al., 2010). Now, the future of the hotel industry in Pakistan is to expand and build hotels and services according to the need of both national and international tourists as Pakistan is going to be the world's top best destination in the world for tourism.

There has been so much talk during the past few years on CPEC as a game-changer for Pakistan after initiating the CPEC project. CPEC will provide Pakistan with economic opportunities and may increase regional and cross-regional commercial and economic inclusion between South Asia, Central Asia, East Asia, and West Asia (Hussain et al., 2016). The CPEC will also increase tourism service quality, which will have a long-

term influence on socio-economic growth. The development of the E-35 Hazara motorway that extends along the northern areas of Pakistan is to enhance trade, connect two countries to Gwadar port, and, more importantly, enhance tourism. The E-35 Hazara motorway, which is a part of the CPEC road network, will give a new gateway to South Asia, Central Asia, East Asia, and West Asia, as well as a faster and safer mode of road communication for tourists. The goal of this study is to see how the China-Pakistan Economic Corridor affects the hotel business in the Hazara region.

Methodology and Model Specifications

The Hazara region is discussed in this study, which covers two districts: Abbottabad and Mansehra. These districts have been identified as the most frequently visited tourist destinations by the Tourism Corporation of Khyber Pakhtunkhwa (TCKP) and the Galiyat Development Authority (GDA), and the CPEC is also passing through this region.

Sample Distribution and Data Collection

This study relied on primary data, which was gathered using a structured questionnaire. Purposive simple random sampling was used to collect responses from hotel managers/owners about their expectations for hotel industry growth under CPEC. A total of 112 hotel managers and owners were allocated from the three most popular tourist destinations in both districts, with 57 from Abbottabad and 57 from Mansehra. For one hotel, one response from the manager/owner was considered. As a result, answers from 112 hotels were collected for this study. From July to August 2018, data was collected in the research region for two months. During

the pre-interview meeting, hotel managers/owners agreed to voluntarily participate in the study. All the 112 hotel managers/owners gave their verbal consent.

Table 1. Allocation of District Sample to Further most Hotel and Visited Sport Areas

Abbottabad District	Mansehra District
Further allocation:	
Nathia Gali= 19 respondents	Naran Kaghan = 19 respondents
Ayubia= 19 respondents	Balakot = 19 respondents
Abbottabad city = 19 respondents	Mansehra = 19 respondents
Total = 57 respondents	Total = 57 respondents

Source: Authors

Model Specification

The dependent variable in this study is MEH (Manager Expectation for Hoteling Industry Growth under CPEC), which is in binary form. The model of the econometric equation is as under:

$$MEH_{ij} = \beta_0 + \beta_1 Edu_Mij + \beta_2 CWSij + \beta_3 AOCij + \beta_4 IOHIUCij + \beta_5 IMOPij + \beta_6 IOTij + \beta_7 CIUCij + \beta_8 HFSij + \epsilon_{ij} \quad (1)$$

1= if the manager expects that under CPEC Hoteling industry will grow (response is "Yes").

0= Otherwise (if the response is "No")

The coefficients (β 's) in the equation-1 describes the degree of relationship with the dependent variable, MEH, while ϵ is the error term. The definition and the explanation of all variables employed in the model is given as follow in Table 2

Table 2. Variables' Operational Definitions in the Econometric Model

Name of Variable	Operational Definitions
Dependent Variables:	
Manager's Expectation for the hoteling industry's growth under CPEC (MEH)	1 if yes, 0 if no
Explanatory Variables:	
Education of manager	1 for basic education, 0 for higher education
Current working status of the respondent	1 if the owner, 0 if the manager
Hotel facility score	1 for normal, 2 for average, 3 for high/satisfactory
Awareness of CPEC	1for aware, 0 for not aware
Investment opportunities in hoteling industry Increase under CPEC	1if yes, 0 no
After initiating of CPEC project in this region any impact seen on the hotel industry	1 high impact (yes), 0 if no low impact (no)
Tourist will come more due to E-35 motorway	1 if yes, 0 if no
Customer (local and international) increases	

under CPEC 1 if the increase (yes), 0 if not increase

Conceptual Model

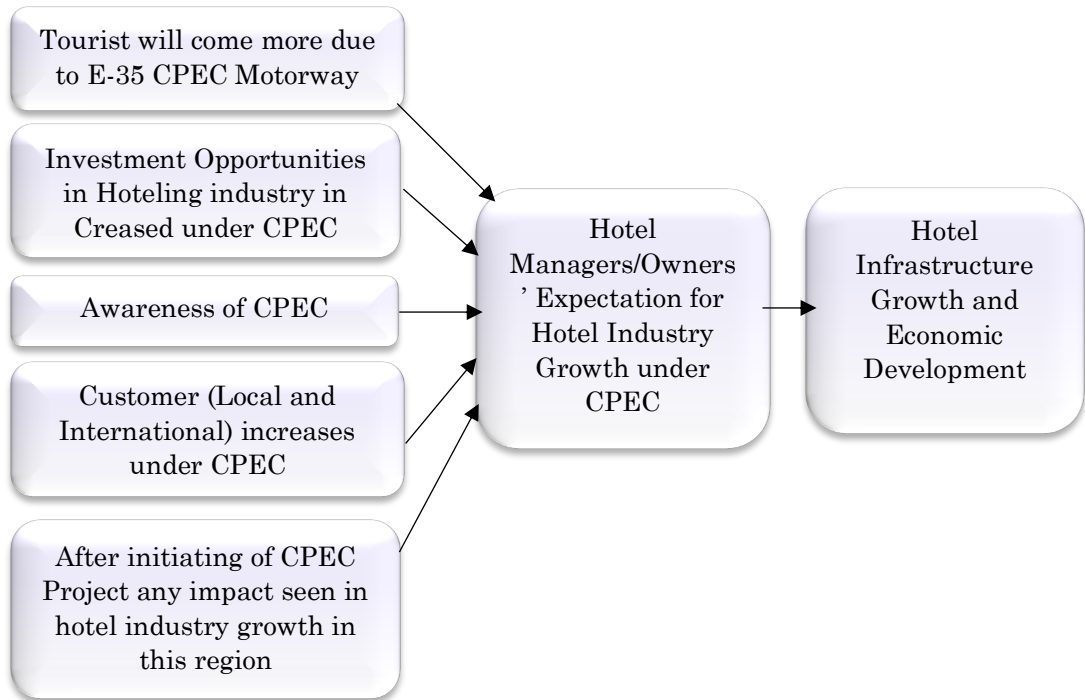


Figure 1: Constructs of Hotel Managers /Owners’ Expectation on Hotel Industry Growth under CPEC

Source: Own Construction

Construction of Hotel Facility Score/Index (HFS)

In the research, Hotel Facility Index is constructed based on six questions regarding facilities and services in the hotel. The index is in binary form. If the reply of the manager to the question for specific hotel services is "Yes," it assigned=1, otherwise 0 if the reply is no. Further, this index is categorized into three groups; normal, average and High/satisfactory. Facilities in hotels value range for normal HFS group from 0 to 3 and for average HFS group from 4 to 5 and further for high/satisfactory HFS group range of value is 6 to 9. The total range is 0 to 9. HFS high/satisfactory

shows that the hotel has maximum facilities. The facilities that asked from manger are includes: 1-Restaurant services; 2- Room services; 3- credit card; 4- Conference Hall; 5- Medical facilities; 6- outdoor sports; 7- Telephone; 8- safety locker; and 9-Foreign Exchange.

Analysis Methodology

The Cross-tabulations was for the bivariate analysis while logistic regression was employed for multivariate analysis.

Results and Discussion

The research work focuses on both descriptive analysis for presenting the

inter-relationship and the econometric analysis between the dependent and independent variables. The following Table-3 describes the frequency and percentages of the hotel manager/owner's expectations rate according to different characteristics in whom the managers responded that the CPEC project has an impact on hotel industry growth.

Furthermore, the econometric model estimated the outcome of several influencing factors on the manager's expectation for the hoteling industry's growth under the China-Pakistan Economic Corridor which is presented in Table-4.

Descriptive Statistics

Table 3. Estimation of Hotel Manager Expectation Regarding Hotel Industry Growth under CPEC by Percentage of each Variable.

Manager's Expectation Regarding Hotel Industry Growth Under CPEC (MEH)	Frequency MEH in Hotel Managers who responded (Yes)	Percentage MEH in Hotel Managers (%)
Education of Manager		
Basic Education	40	35.71
Higher Education	52	53.57
Hotel Facility Scores		
Average	42	37.50
High/Satisfactory	28	25
Normal	22	19.64
Awareness of CPEC		
Aware	86	76.78
Not Aware	6	5.36
Investment opportunities in the hoteling industry increase under CPEC		
Yes	8	7.14
No	84	75
After initiating of CPEC project in this region any impact seen on Hotel Industry		
Low Impact	54	48.21
High Impact	38	33.92
Tourist will come more due to the E-35 motorway		
Yes	24	21.42
No	68	67.85
Customer (local and international) increases under CPEC		
Increase	34	30.35
Not Increase	58	51.78

Current working status of the respondent

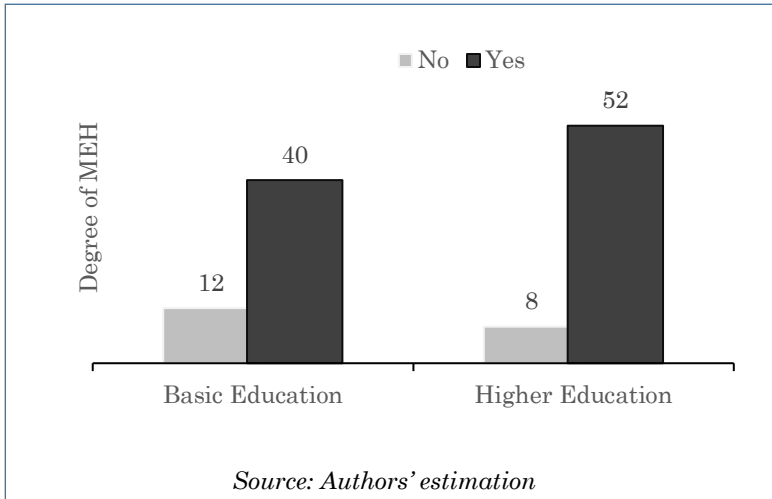
Owner	48	42.85
Manager	44	39.28

Source: Authors' Estimation

Education of Manager

Figure 1 explains that 40 (35.71%) managers have basic education and 52 (53.57%) managers have higher education having a response that CPEC will have

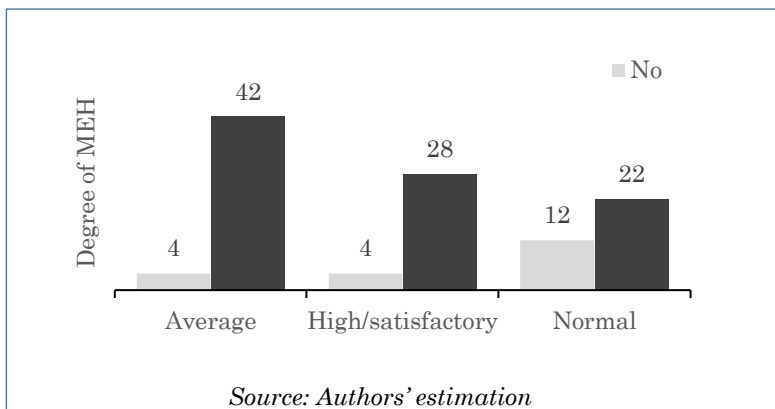
an impact on hoteling industry growth. While 12 managers with basic education and 8 managers with higher education was upset with the same question.



Hotel Facility Scores

The descriptive results show that 42 (37.50%) hotel owner/managers have average hotel facilities, 28 (25%) hotel owners have satisfactory hotel facilities

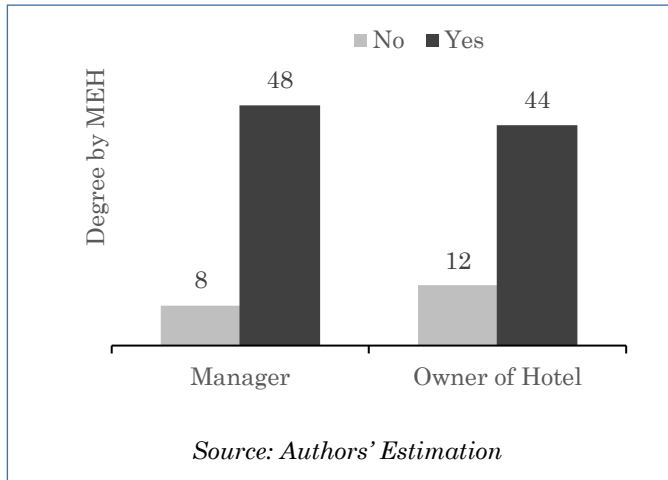
and 22 (19.64%) hotel owners have normal hotel facilities. They responded that CPEC would have an impact on hoteling industry growth. While only 20 managers responded No against the asked question.



Current Working Status of Respondent

Results states that 48 (42.85%) respondents of the study were hotel

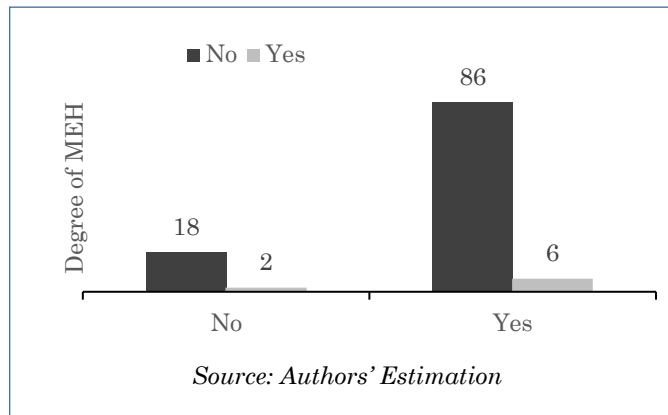
managers and 44 (39.28%) were hotel owners. They answered yes to the question that CPEC will have an impact on hotel industry growth. Only 12 hotel owners and 8 hotel managers reply no to question



Awareness of CPEC

The situation of the result is that 86 (76.78%) managers/owners are aware

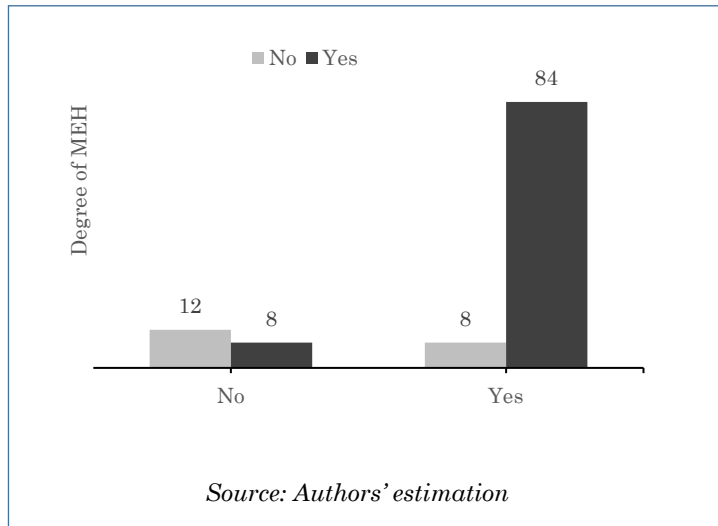
about CPEC and 6 (5.36%) managers are not aware about the CPEC project. They reacted that CPEC will have impact on hoteling industry growth.



Investment Opportunities in Hoteling Industry Increase Under CPEC

Statistics show that 8 respondents having no investment opportunities and 84 (75%)

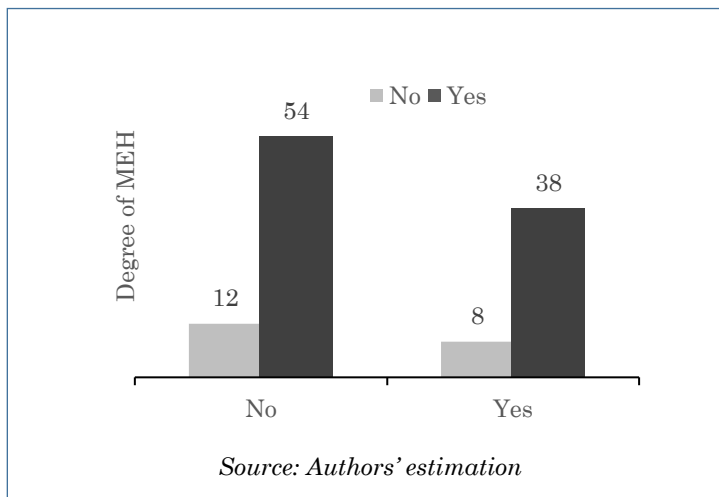
respondents having few investment opportunities responded that CPEC will have an impact on the hoteling industry growth. Only 20 respondents (17.85%) replies that CPEC will not have an impact on the hoteling industry development.



After Initiating of CPEC Project in this Region, any Impact Seen on Hotel Industry

Figure 6 illustrates that 54 (48.21%) hotel manager has seen a low impact after initiating the CPEC project in the region and 38 (33.92%) responded that they have seen high impact. Both responded that

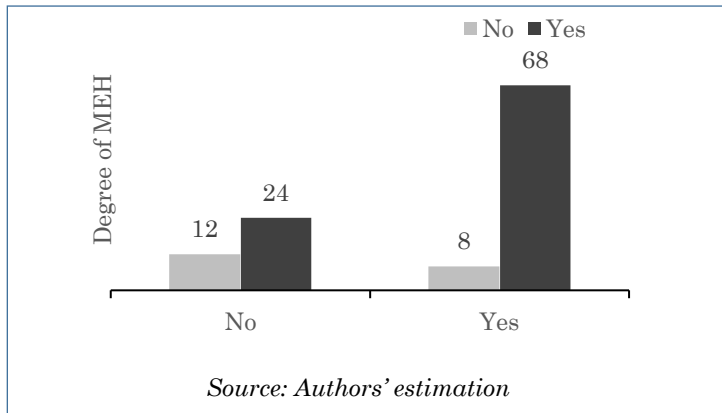
CPEC will have an impact on hoteling industry growth. While around 18% respondents say that CPEC will not have an impact in the future on hotel industry improvement



Tourist will come more due to E-35 Motorway.

The descriptive results express that 24 (21.42%) managers responded that due to E-35 motorway tourist will not increase

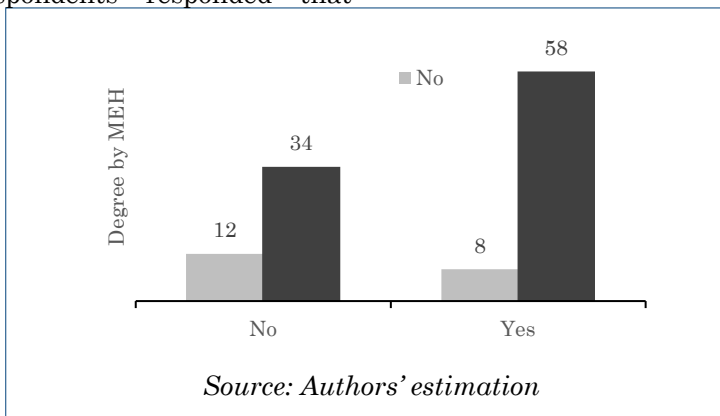
more under CPEC. Same as 68 (67.85%) respondents responded that there will be an increase in tourists under CPEC. Both responded that CPEC will have an impact on hotel industry growth.



Customer (Local and International) Increases under CPEC

The descriptive analysis shows that 34 (30.35%) respondents responded that

customers would not increase while 58 (51.78%) managers responded that customer will increase in the future. Both agreed that CPEC will have an impact on hotel industry growth.



Logistic Regression Analysis of the Factors Linked with the Future Expectations of Hotel Industry's Growth in Hazara Region Under China-Pakistan Economic Corridor

The regression results in Table-4 indicates that hotel manager/owner's future expectation regarding hoteling industry development under CPEC (MEH) is significantly positively related with the hotel facility score (Average category p-value = 0.002, High/Satisfactory category

p-value = 0.097), manager's awareness of CPEC (p-value = 0.005), investment opportunities in hoteling industry under CPEC (p-value = 0.000), impact of project seen in this region after initiating the project (p-value = 0.038), and increase of tourist due to E-35 CPEC highway (p-value = 0.002). While the effect of the current working status of manager (p-value = 0.087) on the manager's expectation of hoteling industry growth under CPEC is negative and significant. Following is a detailed discussion on each variable.

Table 4. Binary Logit Regression Results for Prospects of Hotel Industry Growth Under CPEC

List of Variable	Coefficients	Standard Error	Z- value	P-value
Education of Manager (Edu_M)				
Higher Education	-.5172308	.9315119	-0.56	0.579
Hotel Facility Score (HFS)				
Average	3.864092	1.240694	3.11	0.002***
High/Satisfactory	2.056917	1.239043	1.66	0.097*
Awareness of CPEC (AOC)				
Aware	6.095758	2.174363	2.80	0.005***
Investment opportunities in the hoteling industry increase under CPEC (IOHIUC)				
Yes	5.590861	1.340161	4.17	0.000***
After initiating of CPEC project in this region, any impact seen on Hotel Industry (IMOP)				
High Impact	2.167832	1.042161	2.08	0.038**
Tourist will come more due to E-35 motorway (IoT)				
Yes	3.98173	1.281171	3.11	0.002***
Customer (local and international) increases under CPEC (CIUC)				
Increase	1.827398	1.30444	1.40	0.161
Current Working Status of Respondent (CWS)				
Owner of Hotel	-1.576032	.9202243	-1.71	0.087*
No. of observations= 112			Prob>Chi ² = 0.0000	
Likelihood ratio test χ^2 (9) = 60.59			Pseudo R ² = 0.5764	
Significance level: ***p < 0.01, **p < 0.05, *p < 0.1				
Reference category: Edu_M: Basic Education, HFS: Normal, AOC: Not Aware, IOHIUC: No, IMOP: Low Impact, IOT: No, CIUC: Not increase, CWH: Managers of Hotel				

Source: Authors' estimation.

Investment Opportunities in Hoteling Industry Increase under CPEC

The result shows that the investment opportunities in the hoteling industry under CPEC is positively and significantly related to hoteling industry growth under CPEC. The results are consistent with (Ali et al., 2017), that investment opportunities in the hoteling industry under CPEC has a positive impact on the hotel industry's growth. The majority of 82.14% managers responded that in near future, there will be a greater chance of investment opportunities in hoteling industry under CPEC.

Awareness of CPEC

The result shows that the manager's awareness on CPEC is positively and significantly related to hoteling industry growth under CPEC. During the survey, most of the managers responded that they were aware of CPEC and the data also shows that 92.85% managers are aware of the CPEC project. The 76.78% out of 92.85% managers responded that in the near future, there are high chances of hoteling industry growth under CPEC.

After Initiating of CPEC Project in this Region, any Impact Seen on Hotel Industry

The result shows that the impact of the CPEC project is positively and significantly related to hoteling industry growth under CPEC. The outcomes are similar with ([Ferri, 2004](#)), that construction of highway project has a positive impact on the hotel industry's growth. Most of 41.07% managers responded that in the near future there will be a high impact of CPEC project in the region and in results, the hoteling industry will grow under CPEC.

Tourist will Visit Frequently due to E-35 Motorway

The result explains that the increase of tourists due to the E-35 CPEC highway is positively and significantly related to hoteling industry growth under CPEC. The results are similar with that of ([Ferri, 2004](#)), that A-7 highway project in Spain increases the number of tourists in the northern region and has a positive influence on the growth of hoteling and tourism industry. Majority of 67.85% managers responded that in near future there will be significant changes of hoteling industry growth due to increase of tourist through E-35 CPEC highway under the CPEC.

Current Working Status of Respondent

The result shows that the being the owner of the hotels there is less likely that the growth in hotel industry under the CPEC as compared to the manager of the hotel counterpart. Most of the owner did not have their understanding regarding pros and cons of CPEC investment opportunities in service sector due to lack of their education, expertise and awareness. If government provide awareness and guide to them, most of them expected that there are high chances of hoteling industry growth in this region under the CPEC.

Hotel Facility Score

The result depicts that the Hotel Facility Score is positively and significantly related to hoteling industry growth under CPEC. The results are consistent with ([Saleem and Raja, 2014](#); [Rao and Sahu, 2013](#); [Vijayadurai, 2008](#); [Chu and Choi, 2000](#); [Tsang and Qu, 2000](#)) that hotel facilities/services have a positive impact on the hotel industry's growth. Both categories of hotel facility score are significant as compare to normal-category, which shows that as much as facilities and services of hotel increases there are high chances that the hotel industry will grow under CPEC in future. Because tourists have more concern regarding basic facilities and services while planning the tour and most of the time their focus remain on hotel facilities in a specific tour place.

Conclusion

The study highlighted that some factors such as hotel facility score, manager's awareness of CPEC, investment opportunities in hoteling industry under CPEC, impact of project seen in this region after initiating of project, and increase of tourists due to E-35 CPEC highway are contributing in growth of hoteling industry under the CPEC and these are very important factors for enhancing the hoteling industry growth under CPEC. In the light of results, most of the local businessman are not aware regarding investment opportunities under CPEC. Results also shows that after the launch of project and constructing E-35 CPEC highway in Hazara region, economic activities has increased and infrastructure have also improved. Further, there is a need to enhance the hoteling sector infrastructure.

The finding of the study stress on enhancement of hoteling infrastructure to meet the demand of tourists because in

these tourism areas there is a lack of rooms availability, awareness of CPEC to investors, lack of hotel facilities i.e., medical facilities, international foods, and lack of communication for investment opportunities in hoteling industry under

CPEC. So, there is a high demand for investment in hoteling industry not for locals but also for foreigners. A number of hotels on international level should build in future as well as facilities to meet the demand for tourists.

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